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What happened if a man owed some money and didn't pay? If the sum owed was over 1,000 leva, the people had to go to Sofia to court. If it was under 1,000 leva, the people appealed to the village court (the mayor was judge, and the registrar was secretary). The creditor made an application for the sum due, and had either to give a certificate that the sum was due or, having no certificate, swear by a cross and the Bible that his claim was just. 686

What happened in case two men got into a fight and hurt each other? In case of a fight or a disturbance of the peace, the men were subject to fine up to 500 leva. However, the mayor smiled when he said: "I haven't given any fines for fighting yet, for I am a man with a Christian soul." Should the mayor feel less virtuous he would fine a drunk, together with the tavern keeper who let him get drunk. The fine would range from two to three hundred leva, leniency being shown to drunken men because they are "not responsible for their actions when drunk." 683

How did people transfer property? The transfer of animals was performed at the *Obshtina.* A bill of sale was made out and signed by the mayor. The transfer of land and houses had to be made through a notary public in Sofia since the banks in such cases usually needed to be consulted regarding indebtedness on the property. 425

How were public lands administered? Because the forest pertaining to the village was not large enough to justify a special forester, it was placed under the care of the *Okoliyski* (county) forester who was in charge of planting new trees. A forest policeman, regularly employed by the *Obshtina,* saw to it that the villagers cut no wood without the special permission of the local authorities. The land belonging to the *Obshtina* had decreased greatly during the past twenty years because of its sale as building sites. If the *Obshtina* decided to sell land valued at less than 200,000 leva, then the *Okoliyski* governor could give permission. For more than that, the Minister of Interior had to approve the transfer. 659

Who saw that roads were kept up and bridges repaired? If a bridge was broken, the fact was reported to the mayor, who sent a man to repair it. The State took care of all the roads outside the village, and the *Obshtina* of those inside. 653

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1930, while on the B. St. Lines for the same period we have an increase of 20.5%.

The Greek Railways had an increase of only 255 kilometers or 9.6% for the period 1914 to 1940, while Bulgaria increased its railway network with 1.025 kilometers or 48.7% after the two national catastrophies (1913 and 1918). Since 1920, for a period of 25 years, Greece has played with the pet idea of building the railroad extension Drama—Kavala, 31 kilometers long, in order to link this sea port with the railroad network. This good intention did not grow up to maturity and the work on this line is left undone until to-day.

Greece suffers of marine hypertrophy. The Greeks control an enormous sea coast line, which they are in no position to make the best use off. Here is how the relation between the sea coast line of the countries and their entire frontier line stands: 80.7% of the entire frontier line of Greece is sea coast line, for Albania the relation is 38.8%, for Yugoslavia — 34.1% and for Bulgaria — 17.5%.

For 1 km. of sea coast we have

Territory: For Greece 22, for Albania 62.2, for Yugoslavia 155 and for Bulgaria 277.5 sq. km.;

Population: for Greece 1060, for Albania 2340, for Yugoslavia 9900 and for Bulgaria 15.000 inhabitants.

57. Construction Work. It is hard to give a satisfactory picture in this brief study about Bulgaria's accomplishement during the last period of her present free existence. Whatever her achievements might be, they would hardly impress a sophisticated reader, who would wish to measure her with the standards of his advanced country, whose present generation probably owes its spiritual and material progress to the advantages of free life and activity of preceding generations. Our picture, however, would not be complete if we said nothing about the technical developments of Bulgaria or about the work of Bulgarian engineers and architects.

Notwithstanding its limited means, the country spared nothing for its public works. About the beginning of the Second World War, Bulgaria was spending on the average about one billion leva annually for government and municipal building operations. This expenditure grew constantly: in 1936 — 457.600.000, in 1937 — 505.600.000, in 1938 — 534.100.000,

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653 in 1939 — 655.600.000, in 1940 — 826.500.000 and in 1941 — 1.130.000.000. These amounts were spent for hospitals, sanatoriums, establishements for economic and agricultural activity, veterinary hospitals, medical centres, public baths, libraries, churches etc.

In the beginning of the Second World War Bulgaria had 4.289 inhabited localities, 2.535 or 59% of which were under public planning and regulation; while out of 384 inhabited localities in the territory of South Dobroudja, annexed to Bulgaria in 1940, only 8 of them enjoyed public plan and regulation. Only 15 out of 2.000 inhabited localities in the provisionally annexed territories of Macedonia, Morava region and Thrace had plans approved for regulation and improvement!

312 If we throw a glance on the water supply situation we would obtain the following picture for Bulgaria:

in the cities:	complete water supply	87.4%
	partial " "	20.2%
	no " "	2.4%
in the villages:	full " "	21.0%
	partial " "	18.1%
	no " "	60.9%

On the other hand, in the annexed part of Dobroudja and the provisionally annexed territories the picture is:

for the cities:	full water supply	0.0%
	partial " "	60.0%
	no " "	40.0%
for the villages:	full " "	0.0%
	partial " "	5.7%
	no " "	94.3%

During the 20 years before the war, Bulgaria laid 4.608 klms. of metalic pipes for water supply and in the new territories, provisionally administered by Bulgaria, a total of 220 klms. of water supply pipes were laid.

We feel that Bulgaria has reason to be proud of the above accomplishment in that respect.

377 There has been a great progress made in the electrification of the country in recent times, but the subject is too large to cover in this brief study. According to the electrification plan of the entire country, in addition to the present big power plants by the coal mines of Pernic, Rakovski, the Rila River and the Vatcha River by Plovdiv, huge power and transmission plants are projected to carry electric energy to

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the remotest corners of the land at a very cheap rate, ranging from 0.5 to 1.0 leva per kilowatt hour. This plan is being revised now and it is anticipated that the enlarged project would absorb an expenditure of 20 billion leva. The consumption of electric energy then would be distributed as follows:

For inhabited localities	28.3 %
For agriculture, including irrigation but without azotic fertilizers	13.—%
For transportation	8.9 %
For industries	45.4 %
and for other purposes	4.3 %
	100.—%

What has been said before about motor-car communifications and roads may be supplemented by the following figures; for the 10 year period from 1932 to 1941 Bulgaria has built 4.568 km. of new roads, 15.736 km of levelling and new road bedding, 17.565 km. of new bridges and drainage works. This meant a total expenditure of 4,150,540,490 leva or about 550,000,000 leva per year. For the same period we have 615 km. of new railway lines at an expenditure of 1,620,000,000 leva.

We will not dwell on the question of dams and irrigation, but will only mention the completed big dam on the river Iskar in the Rila Mountain, with a capacity of 15.000.000 cubic meters of water which is 50 meters high and will note that Bulgaria has spent, during the most trying period of life (1939 — 1941). for:

drainage works	42.750.490.—	leva
stream corrections	22.521.837.—	leva
irrigation	9 469.815.—	leva or a
total of	74.742.142.—	leva.

This was not the end of Bulgaria's efforts. Bulgaria was anxious to take care of the countries which were provisionally under her administration during the last war. Here is some information taken from a controversy on the subject.

A Greek paper discussing the subject of homes and other buildings built by the Bulgarian authorities in the Aegean Coast Region, writes among other things the following:

„If we overlook the public bath at Xanthi built by them for the pleasure and enjoyment of their brothers the Germans,

653 the Bulgarians did not leave us any structure of significance. It is true that in some places between Xanthi and Kavala they built some peasant houses to please the taste of the Bulgarians but not beautiful at all. These houses, however, were built at the expense of Greek economy, with Greek lumber from the Rhodopes, Pirin and the island of Tassos, with Greek labour and with materials from the old houses of our peasants, who were thrown out on the roads because their homes were ruined..."

In reply to this clearly unfavourable and superficial statement the following objection could be raised:

From the first part of May 1941, when the Aegean zone went actually under Bulgarian administrative control, until 9 September 1944, when the Greek authorities took over the district, intensive creative work was carried on in the Aegean zone. This was made possible despite the handicaps of the war situation and the lack of any connections with the old districts of Bulgaria and in spite of shattered roads, demolished bridges and lack of materials. The work went on at a rate which baffled all possible expectations. Not only the amazing speed, but also the ambition put in the work, by the Bulgarian population of local residents and newcomers, made a very deep impression on the foreign Greek, Turkish and Armenian population. They applied themselves on the job as people who took pains in building and managing their own homes and properties.

Model homes, establishments for economic and agricultural activities, new railroads, highways bridges, mines, salt works, fountains, aqueducts, slaughter houses, electrical plants and instalations, public baths, drainage works on the ramifications of the Mesta river, hygienic and city improvements and planning, maitenance of railroads, highways and bridges — all this is the constructive and useful work of the Bulgarian State in the Aegean zone. This work, not to mention the millions spent by private business and initiative for the restorations of abandoned Greek homes, was actually beyond the normal capacity of the Government. What was left over and what was accomplished by the Bulgarian Government and nationals in the Aegean area, for less than three years and a half of occupation, exceeds hundredfold the Greek achievements during 20 years of peacetime activity.

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Even in 1941, the Aegean area presented a vast desert plain where one saw, like an oasis in the desert, here and there a patch of land sown mainly with tobacco and maize insufficient to satisfy the very minimum needs of the district. It looked as if the roller of war had run over it and done away with everything in its path. This was a convincing evidence for the Bulgarians that carelessness and negligence were the attitude of the central Greek authority towards the district.

If we exclude Xanthi, Dedeagatch and Kavala, where after the European war some small refugee homes were built, nowhere else in the Aegean zone will we find any trace of constructive work to demonstrate the care and concern of the Greek Government. The improvement work in the Ser and Demirhissar districts is an exception and an encroachment upon the „harmony of desorder and dull carelessness" in this zone. Even this constructive work, though forced upon the Greeks by foreign suggestion and initiative, has no economic justification, but is prompted by military considerations. Dispite the drainage improvements in the said two districts, the Bulgarian authorities found them as desert plains.

The sturdy Bulgarian arms and tenacity worked and developed these desert areas and turned them into fertile plough fields and gardens, which not only benefited the foreign and Bulgarian population, but afforded pleasure to the eye. The Giumurdjina, Sarashaban, Drama and Ser plains were turned under the Bulgarian administration into a picture land fraught with bounty and beauty which pleased the eye.

The Aegean zone visitor of 1912-1913 would be confounded to find that houses, burned and destroyed way back in the Balkan Wars, were left untouched by human hand until this very day and not one single stone or brick had been placed back in their original places.

Now, this is what one should call „dull carelessness". This is what leaves the visitor with the impression that the Greeks did not regard the Aegean zone as their own land, but as a land taken over by conquest and, for the time being, left to the grace and consideration of a step mother.

Bulgaria administered the region of the Aegean Sea from 1941 to 1944, for three years and a half. Notwithstanding the lack of materials and proper roads for transportation, the Bulgarian Government spent 640,000,000 leva from her appropriations for building, repairs etc. All along the road of Demir

653 Hissar—Ser—Drama—Kavala—Sara Shaban, the Government built 240 model peasant homes amounting to 173,000,000 leva. Other 12 homes were not completed. They cost 4,000,000 leva. Besides these homes the Government built 152 new buildings to be used for economic and agricultural needs at an expense of 209,000,000 leva. For the repair of various buildings a total of 63,000,000 leva was spent. The lumber was altogether new and was supplied from Nevrokop (Bulgaria). All other materials were brought from the old parts of the country with the exception of bricks, which were made on the spot and paid by the Bulgarian contractors at a fair and proper price. The master builders were Bulgarians and the common labour was hired from the local Greeks, who were paid the current wages.

We must add to these expenses the expenditure for work in the following enterprises:

The building of new railway lines	194,000,000	leva
tracing of new lines and maintenance	192,000,000	"
building of roads etc.	253,000,000	"
mines and brine-pits	597,000,000	"
fountains, acqueducts, slaughter houses	61,000,000	"
miscellaneous	140,000,000	"
or a total of over	2,000,000,000	leva,

if we do not include the expenses for new buildings, repairs and improvements, without the current expenses for their maintenance. It will not be an exaggeration if we state that Bulgaria, in this short and war period, did in that respect far more than what Greece had done for 20 years of administration over Thrace. Apart from the worker homes in Kavala and some more significant structures here and there, built with American help, Thrace received from the Greek Government the care of a step-mother.

We must note furthermore, that even private individuals, Bulgarian settlers, spent much of their means to repair the homes that were given them. A large percent should be taken also from the declared amount of 17,000,000,000 leva representing the abandoned property in the Aegean Sea Region.

We must also remember that the above mentioned figures represent the amounts in government appropriations. If we transfer these figures to the present day rate of exchange of the lev, the amounts should be at least doubled.

466 tax, but owing to the poverty of the masses only about 10%, of those liable to serve avail themselves of this opportunity to affranchise themselves, though the percentage of the older classes which liberate themselves from temporary incorporation for 21 days reaches 20% to 25%.

[461] The aim of the law is not merely economic, but also aims at instilling among the conscripts of the labour corps a better comprehension of their duty towards the community, a sense of solidarity, and also a liking for manual work, and open air living, especially among the intelligentsia, who considered any sort of field work beneath their dignity. Originally the law did not provide for exemption by payment, as M. Stambuliiski, who was its chief inspirer, pursued at the same time, another object, that of humbling and persecuting all his bourgeois opponents, but the representatives of the Entente Powers intervened and succeeded in introducing certain modifications which rendered the application of the law much more lenient.

466 The State has derived substantial help from the utilisation of the labour corps, and it must be admitted
● 653 that the condition of both the railways and roads on the repairing of which the labour corps was largely employed would have been infinitely worse off, since the State would not have been in a position to defray the work accomplished on them.

Between the years 1921 and 1931, the annual contingent of youths called upon to join the labour corps varied between 12,000 and 19,000; all those liable to service were not utilised, there not being a sufficiency of work for all, owing to the lack of resources and absence of a plan. It was for the first time in 1932 that as many as 20,750 were incorporated, the number being increased to 26,000 in 1933. The greater part of these labour conscripts were utilised for the construction of railways and

roads as may be seen from the following table which also gives an estimate of the value of the work accomplished:

Year	Work days employed for the construction of railways and roads	Work days utilised on other work	Total work days	Value of the work carried out in leva
1922	2,271,579	322,131	2,593,710	77,811,210
1923	1,345,936	191,069	1,537,005	93,940,134
1924	1,055,789	112,909	1,168,698	66,058,916
1925	962,361	151,473	1,113,834	75,111,237
1926	710,835	201,225	912,060	68,083,877
1927	1,336,980	234,820	1,571,800	135,450,983
1928	1,310,178	214,299	1,524,477	142,075,936
1929	1,310,166	158,553	1,468,719	154,381,307
1930	1,261,359	190,317	1,451,676	142,082,059
1931	1,236,346	167,893	1.404,239	131.858,836
Total	12,801,529	1,844,689	14,646,218	1,086,854,595

To the labour of these conscripts may be ascribed the construction of some excellent highways traversing the Balkan mountains, such as those between Gabrovo and Shipka, Elena and Sliven, and from Troyan southward along the Boyanski Pass, as well as a road some 50 klm. in length along the banks of the river Kritchim to the hamlet of Duvlen in the Rhodopes. It is reckoned that 49·2% of the total labour was absorbed in the construction and reparation of roads, 3.420 klm. of new roads, as well as 436 bridges, having been constructed, and 2,315 klm. of roads repaired. Railway construction and work on ports absorbed 19.2%, and 21·4% was utilised in industrial enterprises, special workshops having been constructed such as a brick factory, a clothing and shoe factory in the vicinity of Sofia, and a timber exploitation works in the State forest of Titsa, in the region of Varna, where the available timber resources were rationally exploited, sleepers for the railways, pit-props for the.

466 653 mines and telegraph poles being prepared, as well as lumber for building purposes. The balance of the available labour was employed in agricultural work, excavations, construction of aerodromes and dams, reparation of thermal bathing establishments, drainage, afforestation, water adduction etc.

The most impressive work undertaken by the labour contingent was the erection of two large dams along the banks of the Danube namely between the mouths of the rivers Isker and Vit, and near the mouth of the river Yantra. The former one 28·3 klm. in length, has secured an area of some 17.000 hectares from the annual floods of the Danube, and the latter which is a massive dam 17 klm. in length, 24 m. wide at its base, and 5 to 7 m. in height, bearing an excellent road on top has served to reclaim 1,100 h. of marsh land and protect another 1,250 h. from floods. The total cost of this last dam at the mouth of the Yantra to the State was 32 million leva.

Certain other workshops which had been opened at Shumen and Radomir as well as certain agricultural enterprises, and cattle ranches have not proved successful and were closed.

466 652 The financial results of the experiment may be gauged by the folloving table compiled by the Direction of the Labour Service and which coves the whole period of its functionment from its inception to March 31st 1932.

Disbursements cover: salaries and office expenses of the permanent staff, food, medical attendance, clothing, equipment, general expenses, depreciation of machinery etc. Under the heading of receipts figure, the sums paid for exemption from service, proceeds from the sale of various materials, as well as reimbursements by the various ministries of a nominal wage per man, for the number of labour conscripts affected to their services. This last practice was initiated in the financial year 1924/5 in order

not justified. By the year 1931-2 the number of stations had increased by 30%, plus another 195 small stations, or halting places and though the milage had also augmented, nevertheless the staff numbered 16,602, so that M. Yaranov's criticism seems to have been well-founded so far as the year 1927-8 is concerned, this may be said also of his remarks about the stopping places being too numerous and involving a tremendous waste of energy to the trains having to pull up and start at very brief intervals.

Owing to the lack of funds, special measures had to be devised in order to provide the requisite means for the construction of the new railway lines. Thus a special tax was imposed on the inhabitants of communes through which new railway lines were laid and municipalities had to expropriate land and provide labour at their own cost. The compulsory labour service was utilised, and it may be said that without the help of this institution little of what was done would have been accomplished.

An idea of the cost of the new lines and of the repartition of the expenses may be formed by studying the data relative to the Plovdiv-Panagurishte line of 70·880 klm. in length, which cost a total of 117,458,474 leva, or 1,640,010 leva per klm. Eventually it is proposed to join up this line with the projected trunk line Sofia-Pirdop-Kazanlik-Sliven-Burgaz, parts of which have already been built.

20,937,003	leva	Work furnished by temporary labour conscripts (defrayed by communes)
14,668,896	"	Work furnished by regular labour conscripts (defrayed by the State)
2,120,985	"	Land and building expropriated by the communes
1,543,525	"	Sum provided by the State budget
556,910	"	" " " " " extra-ordinary budget.
39,123,615	"	Sum provided from the Railway special construction Fund (Amounting to 408 millions in 1932.
10,000,000	"	Sum provided from the Railway special Fund for embellishments and Station installations (Amounting to 221 millions in 1932)

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20,820,000 leva value of materials furnished by the State Railways
7,687,550 " Various

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The average cost seems to range between 1½ and 2 million leva per klm. Thus the line Plovdiv-Karlovo, 77·530 klm. in length cost 152 millions or slightly under 2 million leva per klm., while the line Levski-Lovets cost only 1½ millions per klm. It may be added that it took 12 years to complete the building of the line Plovdiv-Panagurishte and this tardiness is due to the fact that instead of concentrating all efforts on one or two lines, some 21 lines were being constructed simultaneously. This was anything but a sensible plan, in view of the utterly inadequate means at the disposal of the railway administration. In many instances earthworks which had been completed were washed away and had to be constructed anew before the ballast, sleepers and rails could be laid.

The general plan of construction of railways was set forth in a Bill passed by the Sobranye on May 9, 1925 and provided for the construction of the following lines:

Normal gauge

1. Rakovski—Haskovo—Mastanli
2. Radomir—Gorna-Djuma—Simitli
3. Yambol—Elhovo
4. Lovets—Levski
5. Dabovo—Sliven
6. Plovdiv—Karlovo (with branch to Hissar)
7. G. Orehovitsa—Elena
8. Sofia,-circular
9. Kritsim—Pestera
10. Sofia—D. Kamartsi—Pirdop
11. Plovdiv—Panagurishte,

Narrow 76 cm. gauge

12. Tatar Pazardjik,—Ledjene—Nevrokop
13. Bela Slatina -Orehovo
14. Preslav—Verbitsa
15. Tserven Breg—Lukovit—Teteven
16. Burgaz—Anhialio.

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On the completion of these lines, the bill provided for a further plan of construction which comprised the laying of lines between:

17. Simitli—Petrich
18. Rakovski—Mihailovo
19. Shumen—Smedovo—Karnobat
20. D. Kamartsi—Orhanie—Yablanitsa—Sevlievo—Tirnovo · Osman-Pazar—Eski Djuma
21. Orhanie—Mezdra
22. Levski—Trembesh
23. Kostenetz Bania—Samokov—Dubnitsa—Bobov Dol
24. Stanimaka—Tsepelare—Pashmakli
25. Popovo—Razgad—Kemanlar
26. Batanovtsi—Breznik—Tren
27. Boltsinovtsi—Glozene—Kozlodyi
28. Vidin—Kula
29. Pirdop—Karlovo—Kazanlik
30. Zimnitsa—Kotel
31. Somovit—Nikopol
32. Pleven—Lovets
33. Lovets—Trojan (eventually to be prolonged southwards to Karlovo
34. Kirdjali—Ortakey
35. Drenovets—Belogradchik—Stakevski
36. Dolen Tsiflik—Staro Orehovo
37. Zlaten Dol—Kavakli—Elhovo—Burgaz.

Narrow 76 cm. gauge

38. Anhialo Mesembria
39. Malko Tirnovo—Vasiliko
40. Razlog · Simitli.

Of the above programme, lines, 1, 3, 4, 5, 6, 11, 13, 16, have been completed, while work on lines 2, 7, 8, 9, 10, 12, 14, 15, 19, 25, 29, 21, 33, and 36 has been started and is being continued but at a very slow pace. Owing to the extremely difficult position of the Exchequer only 17,050,000 leva were provided in the 1934 budget for railway construction, and it had been decided that work should be concentrated on the completion of the Radomir-Dupnitza-G. Djuma, Mihailovo-Rakovski, Sofia circular line,

and the 76 cm, narrow gauge railway Tatar-Pazardjik-Yakoruda-Nevrokop. The Mihailovo-Rakovski line is likely to prove of some importance for international traffic, as it is proposed to organise a service of through trains running from Poland by way of Rumania via Rustchuk-Tirnovo-St.-Zagora to Constantinople, which will necessarily borrow this connecting link, shortening, very perceptibly the distance St.-Zagora-Constantinople by avoiding the long loop round Plovdiv. 499 653●

The technical committee of the railways has made certain alterations in the original construction plan of 1925 and these modifications have been set forth in a protocol dated January 1929. Thus line № 20 is to be deflected in its eastward part more to the south, avoiding Osman Pazar and Eski-Djuma, in order to pass through Zlataritsa — Elena — Titsa and join the line № 14 Verbitsa - Preslav, which will be constructed as a normal gauge line instead of as a 76 cm, narrow gauge line, as originally projected. It is surprising that this scheme has not been a little further modified so that Mihailovo might be joined to Gabrovo and the already existing railway line Gabrovo—Drenovo—Tirnovo utilised, instead of leaving Gabrovo as a terminus of a blind-alley railway line despite the industrial importance of this town. Another decision taken was that of modifying line 38, (Anhialio — Messembria) to a normal gauge, though the construction of this particular line seems utterly purposeless, there being no traffic to justify such expenditure, besides the fact that both termini are ports and that communications between them are always available by boat or by road vehicles.

There are about 19 lines of an approximate legth of 790 klm. on which work has been started; they are estimated to cost about 1,450 millions, there being some 9.750 klm. of tunnels to be bored. But in order to complete the programme which has been set forth some 210

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klm more have to be constructed, necessitating a further outlay of 1684 millions, for in this section the length of tunnels is estimated at 20.900 klm. These 30.650 klm. of tunnels will require some 1150 millions for their completion. The money can not be provided out of local resources, and since the new lines which are now being constructed can only be exploited sectionally and therefore uneconomically, so long as the whole programme of construction is not completed it would be judicious to seek outside help instead of exploiting for a series of years various unconnected branch lines at a clear loss. With the existing competition of motor vehicles it seems now senseless to run trains on small branch lines of 30 or 40 klm in length; which will eventually be joined up to form a big trunk line. So long as they are worked in sections they cannot attract much traffic and are unable to cover expenses, while if they were to be joined up, they could be exploited more rationally and made to pay, besides contributing to the development of the region they traverse. As an instance, lines 10 and 29 may be cited. They are planned to link up and be joined to the existing branch line Kazanlik—Tulovo which has been connected with the newly constructed branch line № 5 (Dubovo—Sliven) already extended to Zimnitsa, a station on the railway line St. Zagora—Burgas. On this proposed trunk line between Sofia and Burgas there are already three sections which are being exploited, namely the ones between Sofia and Makotsevo,[1] Kazanlik and Tulovo, and Dubovo and Sliven. Several complete trains are being daily run on them, apparently at a loss, for most often the passengers using them may be counted on one's fingers. For on such short distances trains are always at a disadvantage as compared with motor vehicles, which,

[1] The unfinished section Makotsevo—Kazanlik is estimated to cost about 800 million leva.

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as everywhere else are proving formidable rivals to the railways. The line Kazanlik - Tulovo is hardly utilised by passengers proceeding or returning to and from Kazanlik—St. Zagora. They prefer to drive by motor car, the journey by road vehicle being more rapid and cheaper. Most of these short branch lines can serve no useful purpose and they will always be a financial burden to the railway system. If so many short branch lines figure in the proposed programme of construction this should be attributed to the influences exerted by certain politicians, who always wish to gain popularity in a certain district by securing the construction of a railway line through it, without regard as to whether its construction will be profitable or not to the State. It would be by far more rational not to undertake the construction of such lines as Nos 9, 22, 26, 27,28, 30, 34, 35, 36, 38 and 39 and instead build good roads, it would be equally sensible too to suspend the running of complete trains on such short distances as Kazanlik—Tulovo, Sofia—Bankia, Lovets—Levski etc,, and replace them by light steam-driven units, or motor rail-cars which are practically omnibuses mounted on railway wheels[1]. It would thus be possible to have both a frequent and a speedy service, advantages now possessed by the road vehicles which are competing the railways most successfully on all short distance lines.

The railway system according to M. Ivan Dorossiev's "Financial Studies on the Bulgarian State railways," seems to suffer from another serious disability, that of being very carelessly constructed. In order to reduce the initial outlay, all technical work which could be dispensed with was avoided, with the result that there are too many gradients,

[1] Four such railcars have been ordered on a compensation basis, and ten more will be provided for in the 1935 budget. The railway administration considers that it needs at least thirty more.

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rendering the working of the line more costly than it need have been. According to the data furnished by this author, of the 2,205 km. existing in 1919, 26.30 % were level, 46 % with gradients varying between 1 and 10 per % and 27.6 % with gradients over 10 per %. The existence of so many steep gradients of more than 10 % in the net work is surprising, for even in Switzerland, the most mountainous country in Europe, the percentage of such gradients was only 20.4 % as compared with 27.6 % in Bulgaria, while in Rumania the percentage is only 7.2 %. The part of the network which has mainly contributed to increase this disadvantage is the section Tirnovo-St. Zagora which traverses the Balkans and which if it had been more carefully built could have proved of great value to the country since it could then have been utilised as an international trunk line, a function which in its present state it can not fulfil economically, as regards goods traffic, but can only compete for the carriage of passengers, and for the lighter and more valuable class of goods[1]

The history of this line is worth repeating as it illustrates to what extent politicians made light of their country's welfare and to what subterfuges and trickery they would have recourse to in order to further their own interests. The technical staff of the railway administration was utterly opposed to the construction of this trans-Balkan line in its present form. Their plan was to lay the line further east along the Haim Bogaz Pass, and this view was championed by the then Minister of Communications, M. Gatev, who was the only honest man in a cabinet composed of crooks, and presided over by an, arch-cynic Prime Minister, the late D. Petkov. The latter

[1] Deputy D. Neikov stated on June 28, 1928 in the Sobranye: „This line was constructed against the advice of the most competent technicians, it has gradients of 30%, and its upkeep and utilisation cause an excessive outlay to the railway administration".